

WHAT IS CLAIMED IS:

1. An image sensing apparatus comprising:

5 a detection unit for detecting whether or not a
stereoscopic compatible optical unit for
stereoscopically sensing an optical image is mounted;
a signal processing unit for performing signal
processing on an image, sensed by an image sensing
device, by employing a first signal processing method or
10 a second signal processing method compatible to
stereoscopic image sensing, which is different from the
first signal processing method; and

a control unit for switching from the first signal
processing method to the second signal processing method
15 for said signal processing unit when said detection unit
detects that the stereoscopic compatible optical unit is
mounted.

2. The image sensing apparatus according to claim 1,
20 wherein said stereoscopic compatible optical unit
comprises left and right optical lenses for alternately
inputting left and right optical images field by field
to the image sensing device.

25 3. The image sensing apparatus according to claim 2,
wherein in the second signal processing method, said
signal processing unit performs signal processing based

on an image obtained in every other field.

4. The image sensing apparatus according to claim 1,
wherein said stereoscopic compatible optical unit

5 comprises left and right optical lenses, and

in the second signal processing method of said
signal processing unit, signal processing is performed
separately for an image from the left optical lens and
an image from the right optical lens.

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5. The image sensing apparatus according to claim 1,
wherein in the first signal processing method, said
signal processing unit performs signal processing based
on a temporally adjacent image.

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6. The image sensing apparatus according to claim 1,
wherein said signal processing unit includes a
compression processing unit for performing compression
processing on an image.

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7. The image sensing apparatus according to claim 1,
wherein said signal processing unit includes a cyclic-
type noise reduction processing unit for reducing noise
of an image.

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8. An image sensing system comprising:
a stereoscopic compatible optical unit, capable of

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being mounted to or removed from an image sensing
apparatus main body, for stereoscopically sensing an
optical image;

5 a detection unit for detecting whether or not said
stereoscopic compatible optical unit is mounted;

a signal processing unit for performing signal
processing on an image, sensed by an image sensing
device, by employing a first signal processing method or
a second signal processing method compatible to
10 stereoscopic image sensing, which is different from the
first signal processing method; and

a control unit for switching from the first signal
processing method to the second signal processing method
for said signal processing unit when said detection unit
15 detects that the stereoscopic compatible optical unit is
mounted.

9. The image sensing system according to claim 8,
wherein said stereoscopic compatible optical unit
20 comprises left and right optical lenses for alternately
inputting left and right optical images field by field
to the image sensing device.

10. The image sensing system according to claim 9,
25 wherein in the second signal processing method, said
signal processing unit performs signal processing based
on an image obtained in every other field.

11. The image sensing system according to claim 8,
wherein said stereoscopic compatible optical unit
comprises left and right optical lenses, and

5 in the second signal processing method of said
signal processing unit, signal processing is performed
separately for an image from the left optical lens and
an image from the right optical lens.

10 12. The image sensing system according to claim 8,
wherein in the first signal processing method, said
signal processing unit performs signal processing based
on a temporally adjacent image.

15 13. The image sensing system according to claim 8,
wherein said signal processing unit includes a
compression processing unit for performing compression
processing on an image.

20 14. The image sensing system according to claim 8,
wherein said signal processing unit includes a cyclic-
type noise reduction processing unit for reducing noise
of an image.

25 15. A signal processing method comprising the steps
of:

detecting whether or not a stereoscopic compatible

optical unit for stereoscopically sensing an optical image is mounted;

when a detection unit detects that the stereoscopic compatible optical unit is mounted,

5 switching from a first signal processing method to a second signal processing method for processing an image sensed by an image sensing device; and

performing signal processing on the image, sensed by the image sensing device, by employing the second
10 signal processing method.

16. The signal processing method according to claim 15, wherein the stereoscopic compatible optical unit comprises left and right optical lenses for alternately
15 inputting left and right optical images field by field to the image sensing device.

17. The signal processing method according to claim 16, wherein in the second signal processing method,
20 signal processing is performed based on an image obtained in every other field.

18. The signal processing method according to claim 15, wherein the stereoscopic compatible optical unit
25 comprises left and right optical lenses, and

in the second signal processing method, signal processing is performed separately for an image from the

left optical lens and an image from the right optical lens.

19. The signal processing method according to claim
5 15, wherein in the first signal processing method,
signal processing is performed based on a temporally
adjacent image.

20. The signal processing method according to claim
10 15, wherein said signal processing method includes an
image compression processing method.

21. The signal processing method according to claim
15 15, wherein said signal processing method includes a
cyclic-type noise reduction processing method for
reducing noise of an image.

22. A storage medium storing a signal processing
method for executing the steps of:
20 detecting whether or not a stereoscopic compatible
optical unit for stereoscopically sensing an optical
image is mounted;
when a detection unit detects that the
stereoscopic compatible optical unit is mounted,
25 switching from a first signal processing method to a
second signal processing method for processing an image
sensed by an image sensing device; and

performing signal processing on the image, sensed by the image sensing device, by employing the second signal processing method.

5 23. The storage medium according to claim 22, wherein the stereoscopic compatible optical unit comprises left and right optical lenses for alternately inputting left and right optical images field by field to the image sensing device.

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24. The storage medium according to claim 23, wherein in the second signal processing method, signal processing is performed based on an image obtained in every other field.

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25. The storage medium according to claim 22, wherein the stereoscopic compatible optical unit comprises left and right optical lenses, and

in the second signal processing method, signal
20 processing is performed separately for an image from the left optical lens and an image from the right optical lens.

26. The storage medium according to claim 22, wherein
25 in the first signal processing method, signal processing is performed based on a temporally adjacent image.

27. The storage medium according to claim 22, wherein the signal processing method includes an image compression processing method.

- 5 28. The storage medium according to claim 22, wherein the signal processing method includes a cyclic-type noise reduction processing method for reducing noise of an image.